Applicant: Masayuki Tsuchiya et al. Attorney's Docket No.: 14875-144US1 / C1-A0230P-US

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for isolating a polynucleotide encoding an antibody against a

lesional tissue, wherein the method comprises the steps of:

(a) isolating a single lesional tissue-infiltrating B cell from a lesional tissue; and

(b) obtaining a polynucleotide encoding an antibody heavy chain and a polynucleotide

encoding an antibody light chain of from the isolated B cell.

2. (Original) The method of claim 1, wherein the lesional tissue is a cancer tissue.

3. (Original) The method of claim 1, wherein step (a) of isolating a lesional tissue-infiltrating B

cell comprises the step of excising a region comprising a B cell from a section of said lesional

tissue.

4. (Currently amended) The method of claim 1, wherein step (b) of obtaining a polynucleotide

encoding an antibody-comprises the step of amplifying a gene encoding an antibody variable

region.

5-8. (Canceled)

9. (Currently amended) A method for producing an antibody, wherein the method comprises the

steps of:

(a) isolating a single lesional tissue-infiltrating B cell from a lesional tissue;

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(b) obtaining a polynucleotide encoding an antibody heavy chain and a polynucleotide encoding an antibody light chain of the isolated B cell;

- (c) preparing one or more expression vectors comprising the polynucleotides;
- (d) transforming a host cell with the one or more expression vectors to obtain a transformed host cell expressing the polynucleotides;
 - (e) culturing the transformed host cell of claim 8; and
- (f) recovering an antibody expressed by the transformed host cell-which is the expression product.
- 10-11. (Canceled)
- 12. (Currently amended) The antibody production method of claim 9, wherein the method further comprises the steps of:
 - (1) contacting the antibody obtained by the method of claim 9 with a lesional tissue;
 - (2) detecting the binding between the antibody and the lesional tissue; and
 - (3) selecting the [[an]] antibody if it [[that]] binds to the lesional tissue.
- 13. (Canceled)
- 14. (New) The method of claim 1, wherein the step of isolating a lesional tissue-infiltrating B cell comprises excising a region comprising the B cell from a section of the lesional tissue by laser microdissection (LMD).
- 15. (New) The method of claim 1, wherein the method is repeated for twenty or fewer B cells.
- 16. (New) The method of claim 1, wherein the method is repeated for five or fewer B cells.

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17. (New) The method of claim 1, wherein the lesional tissue is removed from a patient by surgical excision.

- 18. (New) The method of claim 3, wherein the lesional tissue is frozen.
- 19. (New) The method of claim 3, wherein the lesional tissue is fixed.
- 20. (New) The method of claim 1, wherein the B cell is a human B cell.
- 21. (New) The method of claim 1, further comprising obtaining the sequence of a variable region of the antibody heavy chain or light chain.
- 22. (New) The method of claim 1, wherein the lesional tissue is an ateriosclerotic lesion.
- 23. (New) The method of claim 1, wherein the lesional tissue is an inflammatory disease lesion.
- 24. (New) The method of claim 1, wherein the lesional tissue is a lesion generated by an infectious pathogen.
- 25. (New) The method of claim 1, wherein the lesional tissue is an autoimmune disease lesion.
- 26. (New) The method of claim 1, wherein the lesional tissue is an artificially prepared lesion.